## => d his

```
(FILE 'HOME' ENTERED AT 15:48:18 ON 20 AUG 2008)
    FILE 'CAPLUS' ENTERED AT 15:48:41 ON 20 AUG 2008
              E KAMACHI M/AU
L1
            64 S E3 OR E14
L2
             4 S L1 AND POLYSACCHARIDE
    FILE 'STNGUIDE' ENTERED AT 15:52:31 ON 20 AUG 2008
    FILE 'CAPLUS' ENTERED AT 15:55:08 ON 20 AUG 2008
              E KAMACHI H/AU
L3
            50 S E3 OR E5
L4
             2 S L3 AND POLYSACCHARIDE
               E SATOH T/AU
L5
           448 S E3
              E SATOH TOSHIFUMI/AU
L6
           197 S E3
L7
           645 S L5 OR L6
            42 S L7 AND POLYSACCHARIDE
L8
            32 S L8 AND ANHYDRO
L9
L10
            29 S L9 AND PY<=2005
L11
            3 S L10 AND COSMETIC
               E KAKUCHI T/AU
L12
       717265 S E3 OR 35
           374 S E3 OR E5
L13
L14
            50 S L13 AND POLYSACCHARIDE
L15
            46 S L14 AND PY<=2005
L16
             3 S L15 AND COSMETIC
L17
             3 S L15 AND SKIN
L18
       105664 S POLYSACCHARIDE
L19
          2295 S L18 AND POLYMERIZATION
L20
          175 S L19 AND ANHYDRO
L21
             2 S L20 AND (COSMETIC OR SKIN)
=> d stat que
       105664 SEA FILE=CAPLUS ABB=ON PLU=ON POLYSACCHARIDE
L19
         2295 SEA FILE=CAPLUS ABB=ON PLU=ON L18 AND POLYMERIZATION
L20
          175 SEA FILE=CAPLUS ABB=ON PLU=ON L19 AND ANHYDRO
L21
            2 SEA FILE=CAPLUS ABB=ON PLU=ON L20 AND (COSMETIC OR SKIN)
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=> log y

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=> d bib abs 1-4
      ANSWER 1 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
L2
ΑN
      DN
      143:388810
ΤI
      Polysaccharide-based moisture retention polymer compound
      Kamachi, Motoaki; Kakuchi, Toyoji; Satoh, Toshifumi
IN
      Showa Denko K.K., Japan
PA
      PCT Int. Appl., 41 pp.
SO
      CODEN: PIXXD2
DT
      Patent
     English
LA
FAN.CNT 1
                            KIND DATE APPLICATION NO.
      PATENT NO.
                                                                              DATE
                            ----
                                                   _____
                                     _____
     WO 2005095462
                             A1 20051013 WO 2005-JP6406 20050325
PΙ
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML,
               RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
               MR, NE, SN, TD, TG
                                                 JP 2005-100361
                         A
      JP 2005314402
                                    20051110
                                                                                20050331
      US 20070202070
                             A1 20070830
                                                  US 2006-594925
                                                                                20060929
                             A
PRAI JP 2004-105931
                                     20040331
                             P
      US 2004-560605P
                                      20040409
      WO 2005-JP6406
                              W
                                      20050325
AB
      The present invention relates to (1) a moisture retention polymer compound
      comprising a structural unit including a multi-branched
      polysaccharide derivative in which the hydroxyl group (OH) may be
      substituted by OR wherein R represents a hydrogen atom, a hydrocarbon
      having 1 to 30 carbon atoms, or a hydrocarbon having 1 to 30 carbon atoms
      and a hetero atom, and a structural unit without a multi-branched
      polysaccharide derivative, (2) an external preparation for skin comprising
      0.1 to 99.9 % by mass of the polymer compound, which can provide moist
      feeling to the skin and exhibit an appropriate viscosity and solubility, and
      (3) a cosmetic product comprising the external preparation for skin.
RE.CNT 4
                THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
                ALL CITATIONS AVAILABLE IN THE RE FORMAT
      ANSWER 2 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
L2
      ΑN
DN
      143:372872
      Cosmetic preparation forskin moisturizing with multi-branched
ΤI
      polysaccharides
      Kamachi, Motoaki; Kamachi, Harumi; Kakuchi, Toyoji; Satoh,
IN
      Toshifumi
      Showa Denko K.K., Japan
PΑ
SO
      PCT Int. Appl., 44 pp.
      CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
```

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PATENT NO. KIND DATE APPLICATION NO. DATE
                                                               -----
    PΤ
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK,
            LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO,
            NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY,
            TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
            EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
            RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
            MR, NE, SN, TD, TG
                    A
    JP 2005314400
                              20051110
                                         JP 2005-100341
                                                                20050331
PRAI JP 2004-105929
                        Α
                              20040331
    US 2004-105929 A
US 2004-560607P P
                              20040409
    The present invention provides an external preparation for skin, comprising a
AΒ
    multi-branched polysaccharide derivative with multi-branched
    polysaccharide skeleton consisting of saccharides as constituent
    units, wherein at least one of hydroxyl (OH) groups in the multi-branched
    polysaccharide skeleton is substituted by OR (R = H, C1-30 alkyl,
    C1-30 hetero alkyl), which can give moisture and turgor to the skin, and
    cosmetics containing the external preparation For example, polymerization of
    1,6-anhydro-3-D-glucopyranose (13 g) and propylene carbonate (12.5 mL) in
    presence of 2-butynyl-tetramethylene sulfonium hexafluoro antimonate (65.8
    μl) yielded multi-branched polysaccharide A (5.3 g; 41%). A
    skin lotion was prepared containing multi-branched polysaccharide A
    0.5%, 1,3-butylene glycol 9.5%, ethanol 39.6%, castor oil 4.9%,
    methylparaben 0.2%, and water to 45.3%. Application of the lotion to the
    skin of volunteers resulted in enhancement in skin conductivity, indicating
that
    the moisture in the keratin layer was increased to replenish the skin
    moisture.
RE.CNT 10
             THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L2
    ANSWER 3 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
    2005:1077880 CAPLUS <<LOGINID::20080820>>
ΑN
DN
    143:372846
ΤI
    Composition containing multi-branched polysaccharide/functional
    compound complex
    Kamachi, Motoaki; Kamachi, Harumi; Kakuchi, Toyoji; Satoh,
ΤN
    Toshifumi
    Showa Denko K.K., Japan
PA
    U.S. Pat. Appl. Publ., 13 pp.
SO
    CODEN: USXXCO
DT
    Patent
LA
    English
FAN.CNT 1
                                    APPLICATION NO.
    PATENT NO.
                      KIND
                              DATE
                              _____
                                          _____
                                       US 2005-88794
JP 2005-100352
    US 20050220744
                       A1 20051006
                                                                20050325
JP 2005314401
PRAI JP 2004-105930
                       А
                             20051110
                                                                20050331
    JP 2004-105930 A 20040331
US 2004-560606P P 20040409
```

AB The present invention provides a polysaccharide/functional compound complex comprising a functional compound and a multi-branched polysaccharide derivative, wherein the multi-branched

polysaccharide derivative has a skeleton of a multi-branched polysaccharide composed of a saccharide as a structural unit, and at least one of the hydroxyl groups (OH) of the multi-branched polysaccharide is substituted by OR, wherein R represents a hydrogen atom, a hydrocarbon having 1 to 30 carbon atoms, or a hydrocarbon having 1 to 30 carbon atoms and hetero atom. The functional compound can be efficiently incorporated into polysaccharide derivative, and further by exposing the polysaccharide complex to an environment such as a solution, sustained release of the functional compound can be controlled. By utilizing this property, the complex can be efficiently used in external prepns. for skin such as cosmetic products. For example, polymerization of 1,6-anhydro- $\beta$ -D-glucopyranose (13 g) and dried propylene carbonate (2.5 mL) in pressence of 2-butynyl-tetramethylene sulfonium hexafluoro antimonate (65.8  $\mu$ l) yielded multi-branched polysaccharide (5.3 g; 41%). The multi-branched polysaccharide (500 mg), magnesium ascorbic acid 2-phosphate (APM) (500 mg) and water (5 mL) were put into a beaker and dissolved by well stirring. The solution was freeze-dried to obtain multi-branched polysaccharide-APM complex (1.0 g). Skin lotion was prepared containing multi-branched polysaccharide-APM complex 20%, 1,3-butylene glycol 5%, Et alc. 5%, citric acid 0.01%, sodium citrate 1%, Me paraben 0.20% and purified water 68.79%.

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L2 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
```

AN 2005:1075594 CAPLUS <<LOGINID::20080820>>

DN 143:352858

TI A skin care and cosmetic preparation containing an inositol derivative

IN Aoki, Hirobumi; Kamachi, Motoaki

PA Showa Denko K. K., Japan

SO PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1																		
	PATENT NO.					KINI				APPLICATION NO.						DATE		
ΡI	WO	WO 2005092285							WO 2005-JP5652						20050322			
		W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	KE,	KG,	KP,	KR,	KΖ,	LC,	LK,
			LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NΙ,	NO,
			NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SY,
			ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW
		RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
			ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
			EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	IS,	ΙΤ,	LT,	LU,	MC,	NL,	PL,	PT,
			RO,	SE,	SI,	SK,	TR,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,
			MR,	ΝE,	SN,	TD,	ΤG											
	EP					A1	20070124			EP 2005-721579						20050322		
		R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
			IS,	ΙT,	LI,	LT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,	BA,
			HR,	LV,	MK,	YU												
	CN	1933804				Α		20070321			CN 2005-80009201							
	JΡ	2005306867 20070219158 2007023684				Α	20051104			JP 2005-89259						20050325		
								20070920		US 2006-594037					20060925			
	KR					А		20070228		KR 2006-722074					20061024			
		814196					20080317											
PRAI	JΡ	2004-89591				Α	20040325											
	US	2004-558551P				P		2004	0402									

WO 2005-JP5652 W 20050322

AB The present invention discloses a preparation to be applied externally to the skin which contains an inositol derivative in which an inositol and a saccharide are combined. The invention aims to provide an external skin preparation that can be spread over skin without causing a granular feeling and has excellent moisturizing effects and of keeping the skin healthy. For example, myo-inositol 1 g was reacted with  $\beta$ -cyclodextrin 1 g in the presence of cyclodextrin glucanotransferase to get glycosyl inositol 1.2 g. A lotion was prepared containing glucosyl inositol 1%, 1,3-butylene glycol 5%, Et alc. 5%, citric acid 0.01%, sodium citrate 1%, Me paraben 0.20% and water 87.79%.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L21
      2 ANSWERS
                CAPLUS COPYRIGHT 2008 ACS on STN
IC
     ICM A61K007-06
INCL 424070100
CC
     62-4 (Essential Oils and Cosmetics)
     Section cross-reference(s): 33
     Composition containing multi-branched polysaccharide/functional
ΤI
     compound complex
ST
     polysaccharide complex prepn cosmetic
     Polysaccharides, biological studies
ΙT
     RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (branched, multi-. complexes; cosmetic composition containing
        multi-branched polysaccharide/functional compound complex)
     Pigments, nonbiological
ΤТ
        (complexes with multi-branched polysaccharide derivs.;
        cosmetic composition containing multi-branched polysaccharide
        /functional compound complex)
ΙT
     Cosmetics
        (emulsions; cosmetic composition containing multi-branched
        polysaccharide/functional compound complex)
ΙT
     Cosmetics
        (lotions; cosmetic composition containing multi-branched
        polysaccharide/functional compound complex)
     Polysaccharides, preparation
ΙT
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (multi-branched, complexes with functional groups; cosmetic
        composition containing multi-branched polysaccharide/functional compound
        complex)
     223560-77-8
ΤТ
     RL: CAT (Catalyst use); USES (Uses)
        (cosmetic composition containing multi-branched polysaccharide
        /functional compound complex)
ΤТ
     50-81-7D, Ascorbic acid, derivs.
                                        76-61-9D, Thymol blue, complexes with
     multi-branched polysaccharide derivs. 476-66-4D, Alizarin
     yellow, complexes with multi-branched polysaccharide derivs.
     547-58-0D, Methyl orange, complexes with multi-branched
     polysaccharide derivs.
                             11121-48-5D, Rose Bengal, complexes with
     multi-branched polysaccharide derivs.
                                             84309-23-9D, complexes
     with multi-branched polysaccharide derivs.
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (cosmetic composition containing multi-branched polysaccharide
        /functional compound complex)
     108-32-7, Propylene carbonate
                                    498-07-7, 1,6-Anhydro
ΤТ
     -\beta-D-glucopyranose
                          64505-10-8
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (cosmetic composition containing multi-branched polysaccharide
        /functional compound complex)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1
L21
      2 ANSWERS
                 CAPLUS COPYRIGHT 2008 ACS on STN
IC
     ICM A61K007-48
     62-4 (Essential Oils and Cosmetics)
     Section cross-reference(s): 33
     Cosmetic preparation forskin moisturizing with multi-branched
ΤI
     polysaccharides
ST
     branched polysaccharide prepn cosmetic moisturizer
ΙT
    Polymerization
```

(anionic; cosmetic moisturizers containing multi-branched polysaccharides) Polysaccharides, biological studies ΤТ RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (branched; cosmetic moisturizers containing multi-branched polysaccharides) Polymerization ΙT (cationic; cosmetic moisturizers containing multi-branched polysaccharides) ΙT Human (cosmetic moisturizers containing multi-branched polysaccharides) ΙT Cosmetics (moisturizers, lotions; cosmetic moisturizers containing multi-branched polysaccharides) TΤ Cosmetics (moisturizers; cosmetic moisturizers containing multi-branched polysaccharides) ΙT 108-32-7DP, Propylene carbonate, reaction products with 1,6anhydro- $\beta$ -D-glucopyranose and leucine Et esteer isocyanate 498-07-7DP, reaction products with propylene carbonate and leucine Et ester isocvanate 90609-13-5DP, reaction products with 1,6anhydro- $\beta$ -D-glucopyranose and propylene carbonate RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (cosmetic moisturizers containing multi-branched polysaccharides) ΙT 108-32-7, Propylene carbonate 498-07-7, 1,6-Anhydro

ALL ANSWERS HAVE BEEN SCANNED

polysaccharides)

 $-\beta$ -D-glucopyranose 90609-13-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(cosmetic moisturizers containing multi-branched